METHOD AND APPARATUS

FOR PASSIVELY CALCULATING LATENCY

FOR A NETWORK APPLIANCE

Abstract

5   A device that passively monitors arriving and departing data packets on one or more networks, correlates arriving data packets with departing data packets, and calculates a latency estimate based on the confidence of the correlation. The device detects and copies data packets arriving at a network device and the data packets departing from the same network device. A timestamp is stored for each arriving or departing data packet. Latency across a network device 10 can be determined based on the timestamps for correlating data packets. Additionally, latency across a network device per protocol layer can also be calculated. Varying levels of confidence of a latency estimation depend on the operation necessarily performed on the data packet by the network device and the protocol level at which correlation between the arriving and departing data packets can be achieved.